

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

Source:

Date Processed by STIC:

10 pc + 355

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- 3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04): U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

Revised 05/17/04



PCT

RAW SEQUENCE LISTING DATE: 12/22/2004
PATENT APPLICATION: US/10/517,333 TIME: 08:53:36

Input Set : A:\ISPT1011.ST25.txt

```
3 <110> APPLICANT: Baker, Brenda F.
              Freier, Susan M.
             Dobie, Kenneth W.
      7 <120> TITLE OF INVENTION: ANTISENSE MODULATION OF IL-1 RECEPTOR-ASSOCIATED KINASE-1
             EXPRESSION
     10 <130> FILE REFERENCE: ISPT-1011
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/517,333
C--> 12 <141> CURRENT FILING DATE: 2004-12-09
     12 <150> PRIOR APPLICATION NUMBER: PCT/US03/18003
                                                                       (P5-6-8) a
     13 <151> PRIOR FILING DATE: 2003-06-09
     15 <150> PRIOR APPLICATION NUMBER: US 10/167,034
     16 <151> PRIOR FILING DATE: 2002-06-10
     18 <160> NUMBER OF SEQ ID NOS: 143
     20 <170> SOFTWARE: PatentIn version 3.3
    22 <210> SEQ ID NO: 1
    23 <211> LENGTH: 20
    24 <212> TYPE: DNA
     25 <213> ORGANISM: Artificial
     27 <220> FEATURE:
    28 <223> OTHER INFORMATION: Antisense Oligonucleotide
    30 <400> SEQUENCE: 1
    31 teegteateg eteeteaggg
                                                                               20
    34 <210> SEQ ID NO: 2
    35 <211> LENGTH: 20
    36 <212> TYPE: DNA
     37 <213> ORGANISM: Artificial
    39 <220> FEATURE:
    40 <223> OTHER INFORMATION: Antisense Oligonucleotide
    42 <400> SEQUENCE: 2
    43 gtgcgcgcga gcccgaaatc
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    47 <211> LENGTH: 20
    48 <212> TYPE: DNA
    49 <213> ORGANISM: Artificial
    51 <220> FEATURE:
    52 <223> OTHER INFORMATION: Antisense Oligonucleotide
    54 <400> SEQUENCE: 3
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    58 <210> SEQ ID NO: 4
    59 <211> LENGTH: 3590
    60 <212> TYPE: DNA
    61 <213> ORGANISM: Homo sapiens
    64 <220> FEATURE:
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Input Set : A:\ISPT1011.ST25.txt

65 <221> NAME/KEY: CDS 66 <222> LOCATION: (80)(2218) 68 <400> SEQUENCE: 4													
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75 gcc ccc ggc gcc cag cac ttc ttg tac gag 76 Ala Pro Gly Ala Gln His Phe Leu Tyr Glu 77 15 20													
79 tgc cgc ttc tac aaa gtg atg gac gcc ctg 80 Cys Arg Phe Tyr Lys Val Met Asp Ala Let 81 30 35													
83 cag ttc gcc gcc ctg atc gtg cgc gac cag 84 Gln Phe Ala Ala Leu Ile Val Arg Asp Gli 85 45 50													
87 gag cgc tcc ggg cag cgc acg gcc agc gtc 88 Glu Arg Ser Gly Gln Arg Thr Ala Ser Va: 89 60 65													
91 cgc aac gcc cgt gtg gcc gac ctc gtg cac 92 Arg Asn Ala Arg Val Ala Asp Leu Val His 93 80 85													
95 ctg ctc cgt gcg cgg gac atc atc aca gcc 96 Leu Leu Arg Ala Arg Asp Ile Ile Thr Ala 97 95 100													
99 ctt ccg tcc cca ggc acc act gcc ccg agg 100 Leu Pro Ser Pro Gly Thr Thr Ala Pro At 101 110 115													
103 ccc gcc gag gcc gag gcc tgg agc ccc cg 104 Pro Ala Glu Ala Glu Ala Trp Ser Pro A 105 125 130													
107 tcc acc ttc ctc tcc cca gct ttt cca gc 108 Ser Thr Phe Leu Ser Pro Ala Phe Pro G 109 140	-												
111 cct gag ctc ggc ctg gtt cca agc cct gc 112 Pro Glu Leu Gly Leu Val Pro Ser Pro A 113													
115 cca tct cca gcc cct tct tct acc aag cc 116 Pro Ser Pro Ala Pro Ser Ser Thr Lys Pr 117 175 180													
119 tcc ctc ctg cag gga gcc cgc ccc tct cc 120 Ser Leu Leu Gln Gly Ala Arg Pro Ser Pr 121 190 195													
123 gag att tcc cgg ggc acc cac aac ttc tc 124 Glu Ile Ser Arg Gly Thr His Asn Phe Se 125 205 210													
127 gag ggt ggc ttt ggg tgc gtg tac cgg gg 128 Glu Gly Gly Phe Gly Cys Val Tyr Arg A 129 220 225													

Input Set : A:\ISPT1011.ST25.txt

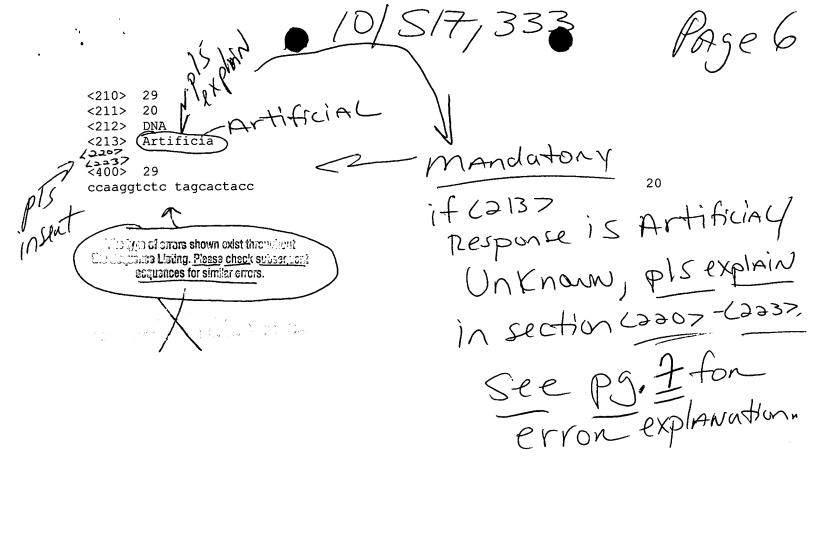
								gag									832
133	ıyı	Ala	vaı	гуъ	240	ьeu	пуъ	Glu	ASII	245	Asp	шeu	GIU	пр	250	AIA	
135	gtg	aag	cag	agc	ttc	ctg	acc	gag	gtg	gag	cag	ctg	tcc	agg	ttt	cgt	880
								Glu									
137		•		255					260					265		•	
	cac	cca	aac		at.a	gac	ttt	gct	aac	tac	t.at.	act	caq	aac	aac	ttc	928
						_		Ala									
141		110	270		V 44 1	1101	1110	275	017	-1-	C, D		280		017		
	tac	taa	_	ata	tac	aac	tta	ctg	aaa	220	aaa	tac		asa	as a	cat	976
		_	_					Leu									370
	ıyı	285	пеп	vai	TAT	GIY	290	пец	FIO	ASII	Сту	295	пец	GIU	тар	AIG	
145	a+ a		+~~	~~~	200	~~~		+~~		aa+	ata		+~~	aat	a.a.	993	1024
								tgc									1024
		HIS	Cys	GIN	Thr		Ата	Cys	Pro	Pro		ser	Trp	PIO	GIII	_	
	300					305					310					315	4.000
	_	_			_			gcc		_		_				_	1072
152	Leu	Asp	Ile	Leu		Gly	Thr	Ala	Arg		Ile	Gln	Phe	Leu		Gln	
153					320					325					330		
	_	_		-				gga	_		_	_					1120
156	Asp	Ser	Pro		Leu	Ile	His	Gly	Asp	Ile	Lys	Ser	Ser	Asn	Val	Leu	
157				335					340					345			
159	ctg	gat	gag	agg	ctg	aca	CCC	aag	ctg	gga	gac	ttt	ggc	ctg	gcc	cgg	1168
160	Leu	Asp	Glu	Arg	Leu	Thr	Pro	Lys	Leu	Gly	Asp	Phe	Gly	Leu	Ala	Arg	
161			350					355					360				
163	ttc	agc	cgc	ttt	gcc	ggg	tcc	agc	CCC	agc	cag	agc	agc	atg	gtg	gcc	1216
								Ser									
165		365	_			-	370					375					
167	cqq	aca	caq	aca	ata	cqq	qqc	acc	ctq	qcc	tac	ctq	CCC	qaq	qaq	tac	1264
			_					Thr	_								
	380					385	•				390					395	
171	atc	aaq	acq	gga	agg	cta	act	gtg	gac	acq	gac	acc	ttc	agc	ttt	aaa	1312
		_	_					Val	_	_	_						
173		-1-		1	400				T.L.	405	F				410	1	
	ata	αta	ata	cta		acc	tta	gct	aat.		agg	act	at.a	ааσ		cac	1360
								Ala									
177	• • •	· u =	141	415	014		D Cu		420	· · · · ·				425			
	aat	aaa	200		224	+ = +	cta	222		cta	ata	722	asa		act	gag	1408
								aaa Lys									1400
	GIA	AIA	_	IIII	пуs	ıyı	пеп	_	Asp	ьец	vai	GIU		Giu	Ala	Giu	
181			430					435					440				1456
								agc									1456
	Glu		GIY	vai	Ala	ьeu	_	Ser	Thr	GIn	ser		Leu	GIN	Ата	GIA	
185		445					450					455					
								gct									1504
		Ala	Ala	Asp	Ala		Ala	Ala	Pro	Ile		Met	Gln	Ile	Tyr		
189						465					470					475	
								999									1552
	Lys	His	Leu	Asp		Arg	Pro	Gly	Pro	Cys	Pro	Pro	Glu	Leu		Leu	
193					480					485					490		
195	ggc	ctg	ggc	cag	ctg	gcc	tgc	tgc	tgc	ctg	cac	cgc	cgg	gcc	aaa	agg	1600

Input Set : A:\ISPT1011.ST25.txt

196	Glv	Leu	Glv	Gln	Leu	Ala	Cvs	Cvs	Cvs	Leu	His	Ara	Ara	Ala	Lys	Arg	
197	1		1	495			-1-	-1-	500			5	5	505	-1-	5	
199	agg	cct	cct	atg	acc	cag	gtg	tac	gag	agg	cta	gag	aag	ctg	cag	gca	1648
200	Arg	Pro	Pro	Met	Thr	Gln	Val	Tyr	Glu	Arg	Leu	Glu	Lys	Leu	Gln	Ala	
201			510					515					520				
203	gtg	gtg	gcg	ggg	gtg	ccc	999	cat	ttg	gag	gcc	gcc	agc	tgc	atc	ccc	1696
204	Val	Val	Ala	Gly	Val	Pro	Gly	His	Leu	Glu	Ala	Ala	Ser	Cys	Ile	Pro	
205		525					530					535					
207	cct	tcc	ccg	cag	gag	aac	tcc	tac	gtg	tcc	agc	act	ggc	aga	gcc	cac	1744
208	Pro	Ser	Pro	Gln	Glu	Asn	Ser	Tyr	Val	Ser	Ser	Thr	Gly	Arg	Ala		
	540					545					550					555	
	_		_	_			_		_	-					gcc		1792
	Ser	Gly	Ala	Ala		Trp	Gln	Pro	Leu		Ala	Pro	Ser	Gly	Ala	Ser	
213					560					565					570		
															gtg		1840
	Ala	Gln	Ala		GIu	Gln	Leu	GIn	_	GIY	Pro	Asn	GIn		Val	GIu	
217				575					580					585	.		1000
															tgg		1888
221	ser	Asp	590	ser	ьeu	GIĀ	GIĀ	ьец 595	ser	Ата	Ата	Leu	600	ser	Trp	HIS	
	++~	20 +		200	taa	aat	ata		002	ac a	000	ata		asa	gcc	aaa	1936
															Ala		1550
225	нец	605	110	Jer	Cys	110	610	дал	110	nια	110	615	n. 9	OIU	mu	OI y	
	t.at		cag	aaa	gac	acq		gga	даа	tida	agc		aaa	agt.	ggc	cca	1984
	_		_		_	_	-		_	_	_				Gly		
	620			1		625		1			630		2		- 1	635	
231	qqa	tcc	cqq	ccc	aca	qcc	gtg	qaa	qqa	ctq	qcc	ctt	ggc	agc	tct	gca	2032
						_		_		_	_		_		Ser		
233	_		_		640				-	645			_		650		
235	tca	tcg	tcg	tca	gag	cca	ccg	cag	att	atc	atc	aac	cct	gcc	cga	cag	2080
236	Ser	Ser	Ser	Ser	Glu	Pro	Pro	Gln	Ile	Ile	Ile	Asn	Pro	Ala	Arg	Gln	
237				655					660					665			
															gac		2128
240	Lys	Met		Gln	Lys	Leu	Ala		Tyr	Glu	Asp	Gly		Leu	Asp	Ser	
241			670					675					680				
	_	-	_	-	_		_					_			gaa		2176
	Leu		Leu	Leu	Ser	Ser		Ser	Leu	Pro	GIY		GlÀ	Leu	Glu	Gln	
245		685					690					695					2212
							gaa										2218
		Arg	GIN	GIY	Pro		Glu	ser	Asp	GIU		GIN	ser				
	700	-++		- ~~~		705		+	. ~~.	 -	710	~++.	-+ +	-~~	+ ~ ~ ~ ~	and to	2278
																agttc	2338
																cgcgg agtgga	2336
																ggaggc	2458
																ctgctg	2518
																cagece	2578
																ageee	2638
																gtgcg	2698
_ • • •	52	,	·23 `		,,,,,,,			3			3	5~~		J-5	5	22-22	

Input Set : A:\ISPT1011.ST25.txt

267	gtg	gctc	acg (cctgi	taato	cc ca	agcad	cttt	g gga	aggc	caag	gcag	ggag	gat (cgct	ggagcc	2758
269	cagt	tagg	tca a	agac	cagco	ca g	ggcaa	acat	g ate	gaga	ccct	gtct	ctg	cca a	aaaa	attttt	2818
271	taaa	acta	tta 🤉	gcct	ggcgt	tg gt	tage	gcac	g cct	tgtg	gtcc	cago	etget	gg g	ggag	gctgaa	2878
273	gtag	ggag	gat (catti	tatgo	ct to	gggag	ggtc	g agg	gctg	cagt	gagt	cate	gat 1	tgtai	tgactg	2938
275	cact	cactecagee tgggtgacag ageaagacee tgttteaaaa agaaaaacee tgggaaaagt											2998				
277	gaag	gaagtatggc tgtaagtctc atggttcagt cctagcaaga agcgagaatt ctgagatcct											3058				
																actggg	3118
	_	-	_		_											cacaga	3178
																	3238
	cgagctccga gccaggtcag gcttcggagg ccacaagctc agcctcaggc ccaggcactg attgtggcag aggggccact acccaaggtc tagctaggcc caagacctag ttacccagac														3298		
	agtgagaagc ccctggaagg cagaaaagtt gggagcatgg cagacaggga agggaaacat														3358		
	tttcagggaa aagacatgta tcacatgtct tcagaagcaa gtcaggtttc atgtaaccga														3418		
	gtgtcctctt gcgtgtccaa aagtagccca gggctgtagc acaggcttca cagtgatttt														3478		
																tccagg	3538
					taaa			_	-		_				-		3590
	_		-	_			,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									
	298 <210> SEQ ID NO: 5																
	299 <211> LENGTH: 712 300 <212> TYPE: PRT																
					Homo	ว รลา	oiens	3									
				NCE:		ر کا کا		•									
			~			Glv	Pro	Glv	Glu	Pro	Δla	Ala	Pro	Glv	Ala	Gln	
306		7114	011	011	5	0-7	110	O-1	O_u	10	****			U	15	0111	
		Phe	Len	Tvr	_	Val	Pro	Pro	Trp		Met	Cvs	Ara	Phe	Tyr	Lvs	
310	1110	1110		20	014	• • • •			25			O _I D	5	30	-1-	-70	
	Val	Met	Aen		T.e.11	Glu	Pro	Δla		Trn	Cvc	Gln	Phe		Ala	Leu	
314	Vai	Mec	35	AId	пец	GIU	FIO	40	App	пр	Cyb	OIII	45	nια	nια	шси	
	Tlo	17-1		Λcn	Gln.	Thr	Glu		720	T.011	Cvc	Glu		Sar	Gly	Gl n	
318	116	50	Arg	Asp	GIII	1111	55	пец	Arg	шец	Cys	60	лгу	DCI	Gry	GIII	
	λνα		בות	Sor	t/a1	T All		Dro	Trn	Tla	Aen		Δen	Δla	Arg	Wa l	
321		1111	Ата	PET	vai	70	пр	FIO	тър	116	75	nr 9	ASII	AIG	Arg	80	
		λan	Lou	17 n l	Uic		T.011	Thr	Uic	T.011		T.011	T.211	Δτα	Ala		
326	AIa	Asp	пеп	vai	85	116	Dea	1111	птэ	90	GIII	neu	пец	Arg	95	nrg	
	λcn	Tla	Tla	Thr		Trn	Uic	Dro	Dro		Dro	T.011	Dro	Ser	Pro	G1 ₃₂	
330	Asp	116	116	100	ALA	пр	urs	PIO	105	AIa	PIO	ъец	PIO	110	FIO	Gly	
	mb ~	πh∽	. ד ג		7.~~	Dro	C02	c~~		Dro	ת ות	Dro	ת דת		Ala	Glu.	
	1111	1111		PIO	Arg	PIO	ser		116	PIO	міа	PIO	125	Giu	AIA	Gia	
334	77.	(T)	115	Desc	7	T	T 0	120	C = ~	Com	71-	Com		Dho	T 011	Cor	
	Ala	_	Ser	PIO	Arg	гуѕ		PIO	ser	Ser	AId	140	TIIL	Pile	Leu	ser	
338	D	130	Dh.	D	a 1	0	135	ml	77.5 m	O	a1		a 1	T 0	~1	T 0	
		Ala	Pne	Pro	GIY		GIN	Thr	HIS	ser		PIO	GIU	ьеи	Gly		
	145	_		-		150			5	D	155	D	G	D	. 1.	160	
	vaı	Pro	ser	Pro		ser	ьeu	Trp	Pro		Pro	Pro	ser	Pro	Ala	Pro	
346	_	_		_	165		_	~ ~	_	170		_	_	_	175	a 1-	
	Ser	Ser	Thr		Pro	Gly	Pro	Glu		Ser	val	ser	Leu		Gln	GIA	
350		_	_	180	_		_	_	185	_				190	_	~-3	
	Ala	Arg		Ser	Pro	Phe	Cys		Pro	Leu	Cys	Glu		Ser	Arg	GIY	
354			195					200		_			205	_		_	
	Thr		Asn	Phe	Ser	Glu		Leu	Lys	Ile	Gly		Gly	Gly	Phe	Gly	
358		210					215					220					
361	Cys	Val	Tyr	Arg	Ala	Val	Met	Arg	Asn	Thr	Val	Tyr	Ala	Val	Lys	Arg	



RAW SEQUENCE LISTING ERROR SUMMARY

DATE: 12/22/2004

PATENT APPLICATION: US/10/517,333

TIME: 08:53:37

Input Set : A:\ISPT1011.ST25.txt

Output Set: N:\CRF4\12222004\J517333.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seg#:13; N Pos. 625

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,6,7,8,9,10,11,16,17,18,19,20,21,22,23,24,25,26,27,28,31,32,33,34,35 Seq#:36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59 Seq#:60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,80,81,82,83,84

Seq#:85,86

Use of <220> Feature (NEW RULES): 7 Sequence(s) __are missing the <220> Feature and associated headings. Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence" or"Unknown". Please explain source of genetic material in <220> to <223> section_(See "Federal Register," 6/01/98, Vol. 63, No. 104,pp.29631-32)

(Sec.1.823 of new Rules)

Seq#:29,79

VERIFICATION SUMMARY

DATE: 12/22/2004

PATENT APPLICATION: US/10/517,333

TIME: 08:53:37

Input Set : A:\ISPT1011.ST25.txt

Output Set: N:\CRF4\12222004\J517333.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:1030 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:600

L:1235 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:29

L:1237 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:29, <213>

ORGANISM: Artificial Sequence

L:1237 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:29, <213>

ORGANISM: Artificial Sequence

L:1237 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:29,Line#:1237

L:1832 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:79

L:1834 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:79, <213>

ORGANISM: Artificial Sequence

L:1834 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:79, <213>

ORGANISM: Artificial Sequence

L:1834 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:79,Line#:1834